NEW MEXICO



ENVIRONMENT DEPARTMENT



Ground Water Quality Bureau

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Draft: November 5, 2020

GROUND WATER QUALITY BUREAU DISCHARGE PERMIT – RENEWAL FOR CLOSURE EXISTING DAIRY FACILITY with a LAND APPLICATION AREA Issued under 20.6.2 and 20.6.6 NMAC

Facility Name:	Borba Farms, LLO

Discharge Permit No: DP-1200

Facility Location: 2801 Milky Way Rd.

Section 11, Township 11S, Range 24E

County: Chaves

Permittee Name: Janet Borba

Mailing Address: 3700 Lovers Lane

Roswell, NM 88203

Permitting Action: Renewal for Closure
Source Classification: Agriculture - Dairy

Permit Issuance Date: DATE
Permit Expiration Date: DATE

NMED Permit Contact: Marc Bonem

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Michelle Hunter
Chief, Ground Water Quality Bureau

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PART A GENERAL INFORMATION

A100 Introduction

A. The New Mexico Environment Department (NMED) issues this Discharge Permit Renewal for Closure (Discharge Permit), **DP-1200**, to Janet Borba (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978, §§ 74-6-1 through 74-6-17, and the New Mexico Ground and Surface Water Protection Regulations, 20.6.2 NMAC and the Supplemental Permitting Requirements for Dairies (Dairy Rule), 20.6.6 NMAC. NMED's purpose in issuing this Discharge Permit to Borba Farms, LLC (dairy facility) is to promote the protection of public health and groundwater resources (groundwater and those segments of surface water gaining from groundwater inflow, for present and potential future use as domestic and agricultural water supply and other uses) by requiring controls on the presence and distribution of water contaminants associated with former dairy facility operations and permanent closure activities and by providing oversight of post-closure monitoring.

- B. Under prior authorization of DP-1200, last issued [before the effective date of the Dairy Rule] on January 4, 2005, the Permittee was authorized a maximum daily discharge volume of 8,400 gallons per day (gpd) of effluent from the Borba Farms, LLC (Milky Way Dairy). Pursuant to site conditions, the discharge may have contained water contaminants or toxic pollutants elevated above the standards of Section 20.6.2.3103 NMAC.
- C. The dairy facility permanently ceased discharging in approximately January 2018. Even after cessation of active discharge, the discharge or leachate retains the potential to move directly or indirectly into groundwater of the State of New Mexico which has an existing concentration of 10,000 milligrams per liter (mg/L) or less of total dissolved solids (TDS) within the meaning of Section 20.6.2.3104 and Subsection A of 20.6.2.3101 NMAC.
- D. The Permittee is authorized to perform closure activities and post-closure monitoring pursuant to this Discharge Permit which contains requirements authorized or specified by the Dairy Rule on condition that the Permittee complies with the Dairy Rule and this Discharge Permit, which are enforceable by NMED.

A101 Terms of Permit Issuance

- A. **Permit Duration** Pursuant to WQA 74-6-5(I) and Subsection H of 20.6.2.3109 NMAC, the term of a Discharge Permit is for the fixed term of **five years** from the effective date of the Discharge Permit. The obligation of the Permittee to implement facility closure and post-closure requirements survives the expiration of this Discharge Permit. If closure or post-closure activities specified herein have not been completed by the Permittee prior to the expiration of this Discharge Permit and/or the Permittee has not received from NMED a notice of Discharge Permit termination, the Permittee must request from NMED a renewal of this Discharge Permit as described in Item C below.
- B. **Permit Fees** As a discharge permit associated with a dairy facility, the Permittee shall remit an annual permit fee payment equal to one-tenth of the applicable permit fee from table 1

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of 20.6.2.3114 NMAC on the first occurrence of August 1 after the effective date of this Discharge Permit, and annually thereafter until expiration or termination of this Discharge Permit [Subsection A of 20.6.6.9 NMAC].

- C. **Permit Renewal** To renew this Discharge Permit, the Permittee shall submit, in accordance with 20.6.6.10 NMAC, an application and any associated fees for renewal at least one year before the discharge permit expiration date, unless permanent closure and cessation of all post-closure monitoring requirements has been approved by NMED before that date.
- D. **Transfer of Ownership** This Discharge Permit is being issued to Janet Borba (Permittee) as identified in **Section A100** above. In accordance with Section 20.6.6.8 NMAC, the Permittee, any listed owner(s) of record, and any [other] holder(s) of an expired discharge permit are responsible for complying with the conditions listed herein and the Dairy Rule. If during the duration of this Discharge Permit a change in the list of responsible parties is required, transfer of ownership shall be completed in accordance with Section 20.6.6.34 NMAC as described further in Item D of **Part C101** of this Discharge Permit.

A102 Applicable Regulations

- A. <u>Scope</u> This Discharge Permit applies solely for the regulation of process wastewater or stormwater generated as a result of former dairy facility operations and closure and post-closure monitoring activities and does not include regulation of domestic wastewater at the facility [Subsection Y of 20.6.6.20 NMAC]. Domestic wastewater generated at the facility is treated or disposed of pursuant to Liquid Waste permit number R0060114.
- B. The Permittee is requesting closure of a facility that meets the definition of "dairy facility." Sections 20.6.2.3000 through 20.6.2.3114 NMAC and Part 20.6.6 NMAC (Dairy Rule) apply to discharges specific to dairy facilities and their operations. Permanent closure of the dairy facility shall be managed in accordance with all applicable requirements of the Dairy Rule and this Discharge Permit.
- C. The discharge from the dairy facility is not subject to any of the exemptions of Section 20.6.2.3105 NMAC.
- D. Groundwater quality as observed in on-site monitoring wells is subject to the criteria of Sections 20.6.2.3101 and 20.6.2.3103 NMAC unless otherwise specified in this Discharge Permit.
- E. Complying with the applicable requirements of 20.6.2 and 20.6.6 NMAC does not relieve a dairy facility's owner, operator or Permittee from complying with the requirements of other applicable local, state and federal regulations or laws.

A103 Additional Information Requirements

A. **No Further Action Required**. The Permittee has satisfied the requirements of Sections 20.6.6.10 and 20.6.6.13 NMAC prior to the effective date of this Discharge Permit.

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A104 Facility: Physical Description

A. This dairy facility meets the definition of "existing facility."

- B. This dairy facility is located at 2801 Milky Way, approximately three miles southeast of Roswell in Section 11, Township 11S, Range 24E, Chaves County. The parcel number for the dairy is 4-138-063-211-363-000000. The former LAAs are currently owned by Chase Farms, LLC and leased to another dairy.
- C. On the effective date of the last Discharge Permit, January 4, 2005, the dairy facility was comprised of the following wastewater system components as identified in the application and the administrative record: Wastewater flows to a concrete sump and is pumped through a screen solids separator to a synthetically-lined wastewater impoundment for storage. Wastewater is land applied by flood irrigation to up to 98 acres of irrigated cropland under cultivation.
 - 1. Wastewater impoundment:
 - a. **Lagoon** was located at the southeast corner of the facility, situated along the western border. Constructed in December 1995, reported to have a synthetic liner, but it was not observed during the 2019 inspection or recorded in previous inspections. The Lagoon retained approximately 2.16 Ac-Ft of wastewater.
 - 2. Stormwater impoundment:
 - a. **Pond** located at the east side of the facility, along the east boundary. Constructed in approximately 2004, of native earth. The Pond retains approximately 3.6 Ac. Ft.
 - 3. Fields within the land application area:
 - a. **Field 1** approximately 40 acres and is located adjacent north of field 2 on the west side. Field 1 includes parcel numbers 4-138-063-213-168-000000 and 4-138-063-212-235-000000 and has been sold. Field 1 received wastewater discharge from approximately February 2004 to approximately January 2018. Wastewater was applied by side-roll irrigation.
 - b. Field 2 approximately 58 acres and is located adjacent north of the corral area, extending east. Field 2 includes part parcel numbers 4-138-063-283-326-000000 and 4-138-063-387-303-000000 and has been sold. Field 2 received wastewater discharge from approximately February 2004 to approximately January 2018. Wastewater was applied by side-roll irrigation.

These system components are identified as potential sources of groundwater contamination and require closure as identified in this Discharge Permit. A summary of all wastewater system components authorized to release/receive discharge under prior issuance(s) of this Discharge Permit is provided in **Section A107.**

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A105 Facility: Documented Hydrogeologic Conditions

A. Groundwater most likely to be affected at this dairy facility is at a depth of approximately 25 feet and had a pre-discharge total dissolved solids concentration of approximately 2,300 milligrams per liter.

B. There are no perennial surface waters existing within the bounds of the facility. The closest surface water system to the facility is the Pecos River, approximately 4.25 miles to the east.

A106 Facility: Existing System Controls

- A. During operation, this dairy facility employed the following system controls pursuant to operational requirements as listed in prior issuance(s) of this Discharge Permit:
 - 1. Impoundments: As listed in Item A 104 (C) above
 - 2. Flow Meters:
 - a. **Meter 1** located at the lagoon to measure the volume of wastewater discharged from the lagoon to the land application areas.
 - b. **Meter 2** located at the parlor sump to measure the volume of wastewater discharged from the production area to the lagoon.
 - 3. Manure Solids Separator:
 - a. **Manure Solids Separator** a mechanical inclined-screen solids separator, located west of the milking parlor.
 - 4. **Monitoring Wells** The dairy facility used the following monitoring wells to supply data representative of groundwater quality:
 - b. **MW-1** hydrologically downgradient of lagoon and located east of the milking parlor, 100 ft from the Wastewater Lagoon.
 - c. **MW-2** hydrologically downgradient of the milking parlor and corrals and located east of the dairy in Field 2 near the east boundary.
 - d. **MW-3** hydrologically downgradient of Field 1 and located east of Field 1 on the east boundary of the adjacent east field.
 - e. **MW-4** hydrologically upgradient of the facility and located northwest of the corrals on the west boundary.

These system controls shall require continued operation and maintenance during closure or post-closure activities and termination and removal as identified in this Discharge Permit.

B. As of the effective date of this Discharge Permit, a total of 4 monitoring wells are documented at or near this dairy facility as identified in the application and/or the administrative record. All facility monitoring wells are subject either to closure or to post-closure monitoring as specified in **Section B102** and in **Table C1** of this Discharge Permit:

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A107 Facility: Discharge Permit History and Prior Authorization

A. The original Discharge Permit was issued on December 13, 1998 and subsequently renewed and modified on, January 4, 2005, respectively. DP-1200, last issued on January 4, 2005, authorized the Permittee to discharge water contaminants as part of facility operations subject to the following requirements:

- 1. Discharge up to 8,400 gpd of wastewater from the production area. Wastewater flowed to a concrete sump and was pumped through a screen solids separator to a synthetic-lined wastewater impoundment for storage. Wastewater wass land applied by flood irrigation to up to 98 acres of irrigated cropland under cultivation.
- 2. Utilize the following impoundments in accordance with Subsection B of 20.6.6.20 NMAC as follows:
 - a. **Lagoon** was authorized to receive wastewater for collection and storage prior to land application. This impoundment *exists* and remains unclosed as of the effective date of this Discharge Permit.
 - b. Pond was authorized to receive stormwater for storage prior to land application. This impoundment *exists* and remains unclosed as of the effective date of this Discharge Permit.
- 3. Apply wastewater and stormwater to fields within the land application area in accordance with Subsections B, C and I of 20.6.6.21 NMAC. The land application area was comprised of the following fields for a total land application area of 98 acres:
 - a. **Field 1** received wastewater between approximately December 13, 2005 to approximately January 2018.
 - b. **Field 2** received wastewater between approximately December 13, 2005 to approximately January 2018.

PART B FACILITY SPECIFIC REQUIREMENTS

B100 Authorization for Land Application During Closure

A. Pursuant to Subsection A of 20.6.6.30 NMAC, the Permittee is **not** authorized to continue to apply wastewater, stormwater, and manure solids and compost to fields within the land application area after permanent cessation of discharge operations in accordance with Subsections B, C and I of 20.6.6.21 NMAC as follows: **Field 1 and Field 2**. Authorization to discharge to these fields is being solely granted for the purposes of completing closure measures as specified in 20.6.6.30 NMAC and shall be redacted upon NMED confirmation of completion of the required closure measures listed in **Table B1** and **Table B3** of this Discharge Permit.

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B101 Facility: Conditions for Closure

A. <u>Impoundments</u>, <u>Ponds</u>, <u>or Lagoons</u> - The Permittee shall permanently close all impoundments, ponds, and/or lagoons at the dairy facility as identified in **Section A104** above in accordance with 20.6.6 NMAC and the conditions summarized in **Table B1** below.

Table B1
Impoundments, Ponds, or Lagoons Closure Requirements

ooundments, Ponds, or Lagoons Closure Requirement Engineering and Surveying

a) None required.

Operations and Maintenance

- b) Within 180 days of the effective date of this Discharge Permit (**by DATE**) empty and land apply all wastewater from the following impoundments, ponds, and/or lagoons in accordance with the **Table B2** of this Discharge Permit: Wastewater Lagoon and Stormwater Lagoon. [Subsection A of 20.6.6.30 NMAC]
- c) Upon emptying each impoundment, pond, and/or lagoon and unless otherwise designated and approved by NMED for continued service as part of closure or post-closure maintenance (see **Table C1** of this Discharge Permit), remove and properly dispose of all supporting infrastructure and any associated system controls used to supply or transfer wastewater and/or stormwater to/from the impoundment, pond, and/or lagoon.
- d) Within two (2) years of the effective date of this Discharge Permit (**by DATE**), remove and land apply manure solids from the following facility impoundments, ponds, and/or lagoons in accordance with conditions specified in **Table B2** of this Discharge Permit: Wastewater Lagoon and Stormwater Lagoon. [Subsection A of 20.6.6.30 NMAC]
- e) Using clean fill for which a borrow source is appropriated by, fill and re-grade all emptied impoundments, ponds, and/or lagoons to blend into the surrounding pre-existing surface topography within two (2) years of the effective date of this Discharge Permit (by DATE) to prevent any subsequent ponding of stormwater in the area. [Subsection A of 20.6.6.30 NMAC]
- f) Send photo documentation to NMED of the properly closed Impoundments and Settling Basins.
- g) Until all wastewater has been removed from an impoundment, pond, and/or lagoon and the feature filled and re-graded to reflect surrounding topography, maintain the feature such that:
 - storage capacity preserves a minimum of two feet of freeboard at all times as required by Subsection D of 20.6.6.17 NMAC. [Subsection A of 20.6.6.21 NMAC]
 - conditions which could affect the structural integrity of the feature or any associated feature liner are prevented. [Subsection P of 20.6.6.20 NMAC]
 - any associated faulty pipe(s) or fixture(s) are repaired or replaced within 72 hours of discovery to mitigate or prevent an unauthorized discharge. [Subsection Q of 20.6.6.20 NMAC]

Inspection and Monitoring

h) None required.

Recordkeeping and Reporting

- i) Report any unauthorized discharges to NMED pursuant to 20.6.2.1203 NMAC.
- j) Unless otherwise specified in this Discharge Permit, continue to submit all required monitoring information quarterly as part of the **Quarterly Monitoring Report** in accordance with the general reporting schedule listed in **Table C1** of this Discharge Permit.

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Table B1 Impoundments, Ponds, or Lagoons Closure Requirements

- k) Until all wastewater is removed:
 - notify NMED within 24 hours of discovery of any observed condition(s) that may impact the structural integrity of a berm or liner or that may result in an unauthorized discharge. [Subsection P 20.6.6.20 NMAC]
 - continue to report composite wastewater sample results to NMED annually as part of the **Quarterly Monitoring Report** due **May 1**. [Subsection C of 20.6.6.25 NMAC]
- I) Maintain written records of any facility inspections performed during closure activities including repairs or replacements. Keep records at the facility or make them available to NMED upon request.
 - B. <u>Manure Solids and Compost</u> The Permittee shall permanently remove from the surface of the dairy facility all residual manure solids and compost in accordance with 20.6.6.30 NMAC and the conditions summarized in **Table B3** below.

Table B3 Manure Solids and Compost Closure Requirements

Ivialitie Solids and Compost Closure Requirements			
Engineering and Surveying			
a) None required.			
Operations and Maintenance			
b) Manure solids and compost shall be removed from surface areas at the dairy facility and transferred off-			
site for proper disposal as authorized by an approved Disposal Plan.			
Inspection and Monitoring			
c) None required.			
Recordkeeping and Reporting			
d) Provide to NMED a summary of completed closure measures according to the implementation schedule in			
the approved Disposal Plan and any associated monitoring and sampling data collected in the Quarterly			
Monitoring Report (see Table C1 of this Discharge Permit).			

C. Monitoring Wells – As part of closure, a Permittee may be required to either install one or more additional groundwater monitoring wells for post-closure monitoring (per Subsection A of 20.6.6.30) and/or plug and abandon one or more existing groundwater monitoring wells (per Subsection C of 20.6.6.30). The groundwater monitoring well system approved for closure of this dairy facility is detailed in Table B4 below.

Table B4 Monitoring Well Requirements for Closure

Engineering and Surveying a) None required. Operations and Maintenance b) Operate and maintain the following existing facility groundwater monitoring wells in compliance with Subsection A of 20.6.6.23 NMAC and this section of this Discharge Permit: MW-1, MW-2, MW-3, and MW-4.

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Table B4 Monitoring Well Requirements for Closure

c) Verify all facility monitoring wells are permanently identified in accordance with Subsection C of 20.6.6.23 NMAC.

Inspection and Monitoring

- d) Continue to perform quarterly routine groundwater sampling of all wells in accordance with Subsection F of 20.6.6.23 NMAC to comply with the required monitoring reporting schedule listed in **Table C1: MW-1**, **MW-2**, **MW-3**, **and MW-4**. Monitoring of these wells shall, at a minimum, continue until all closure measures as specified in **Section B100** of this Discharge Permit have been completed and confirmation of closure completion has been received from NMED. Any post-closure monitoring requirements for the dairy facility are specified in **Section B101** of this Discharge Permit.
- e) Analyze collected groundwater samples according to the methods listed in Subsection B of 20.6.6.24 and Subsection B of 20.6.2.3107 NMAC. Pursuant to Subsection B of 20.6.6.24 NMAC, sample constituents that require analysis and reporting to NMED include: nitrate as nitrogen, total Kjeldahl nitrogen, chloride, sulfate and total dissolved solids. [Subsection G of 20.6.6.23 NMAC]
- f) Prior to the expiration date of this Discharge Permit, NMED shall have the option to perform one downhole inspection of each monitoring well identified in this Discharge Permit. NMED shall establish the inspection date and provide at least 60 days' notice to the Permittee by certified mail. The Permittee shall have any existing dedicated pumps removed at least 48 hours prior to NMED inspection to allow adequate settling time of any sediment agitated as a result of pump removal.
 - Should a facility not have existing dedicated pumps, but decide to install pumps in any of the monitoring wells, NMED shall be notified at least 90 days prior to pump installation so that a downhole well inspection can be scheduled prior to pump placement. [20.6.2.3107 NMAC]

Recordkeeping and Reporting

- g) A <u>Quarterly Monitoring Report</u> shall continue to be filed with NMED in accordance with the general reporting schedule listed in **Table C1**. Each <u>Quarterly Monitoring Report</u> shall contain, at a minimum, the following information: [Subsection G of 20.6.6.23 NMAC]
 - Facility map with location and number of each well in relation to the contamination source it is intended to monitor
 - Depth-to-shallowest groundwater measurements
 - Field parameter measurements and parameter stabilization log
 - Analytical results (including the laboratory quality assurance and quality control summary report)
 - Groundwater elevation contour maps utilizing elevation contours of 2 ft or less in accordance with Subsection L of 20.6.6.23 NMAC
 - D. <u>Stormwater Management</u> During implementation of both closure measures and postclosure monitoring, the Permittee shall manage stormwater at the dairy facility in accordance with 20.6.6 NMAC and the conditions summarized in **Table B5** below.

Table B5 Stormwater Management During Closure and Post-Closure

Engineering and Surveying

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Table B5 Stormwater Management During Closure and Post-Closure

a) None required

Operations and Maintenance

- b) Implement stormwater management by: [20.6.2.3109 NMAC]
 - Maintain stormwater conveyance [Subsection H of 20.6.6.20 NMAC]
 - Divert stormwater to minimize stormwater ponding and infiltration. [Subsection H of 20.6.6.20 NMAC]
 - Before removal is complete, maintain diversions for facility stormwater run-on and run-off to prevent ponding within areas used for manure and compost stockpiling [Subsection S of 20.6.6.20 NMAC]

20.0.0.20 NIVIAC]				
Inspection and Monitoring				
c) None required				
Recordkeeping and Reporting				
d) None required				

B102 Facility: Conditions for Post-Closure Monitoring and Maintenance

- A. Pursuant to Subsection B of 20.6.6.30, the Permittee may initiate post-closure monitoring and maintenance at a dairy facility following completion of and confirmation by NMED that the requirements of **Section B100** have been adequately met.
- B. <u>Groundwater Monitoring</u> The Permittee is required to perform post-closure groundwater monitoring in accordance with Subsection B of 20.6.6.30 NMAC and **Table B6** below.

Table B6 Post-Closure Groundwater Monitoring Requirements

Engineering and Surveying

a) None required.

Operations and Maintenance

b) Operate and maintain the following facility groundwater monitoring wells for post-closure monitoring in compliance with Subsection A of 20.6.6.23 NMAC and this section of this Discharge Permit: MW-1, MW-2, MW-3, and MW-4.

Inspection and Monitoring

- c) Unless an alternate monitoring frequency schedule is proposed by the Permittee and subsequently approved by NMED, perform [quarterly] routine groundwater sampling of all post-closure monitoring wells in accordance with Subsection F of 20.6.6.23 NMAC to comply with the required monitoring reporting schedule listed in **Table C1**: **MW-1**, **MW-2**, **MW-3**, **and MW-4**. Post-closure monitoring at a dairy facility shall continue [until a minimum of eight consecutive groundwater sampling events] confirm that the standards of 20.6.2.3103 NMAC are not exceeded and the total nitrogen concentration in groundwater is less than or equal to 10 mg/L. If monitoring results show failure of one or both of these conditions, the Permittee shall implement contingency requirements pursuant to 20.6.6.27 NMAC (**Section B102**).
- d) Analyze collected groundwater samples according to the methods listed in Subsection B of 20.6.6.24 and Subsection B of 20.6.2.3107 NMAC. Pursuant to Subsection B of 20.6.6.24 NMAC, sample constituents that

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Table B6 Post-Closure Groundwater Monitoring Requirements

require analysis and reporting to NMED include: nitrate as nitrogen, total Kjeldahl nitrogen, chloride, sulfate and total dissolved solids. [Subsection G of 20.6.6.23 NMAC]

e) Prior to the expiration date of this Discharge Permit, NMED shall have the option to perform one downhole inspection of each monitoring well identified in this Discharge Permit. NMED shall establish the inspection date and provide at least 60 days' notice to the Permittee by certified mail. The Permittee shall have any existing dedicated pumps removed at least 48 hours prior to NMED inspection to allow adequate settling time of any sediment agitated as a result of pump removal.

Should a facility not have existing dedicated pumps, but decide to install pumps in any of the monitoring wells, NMED shall be notified at least 90 days prior to pump installation so that a downhole well inspection can be scheduled prior to pump placement. [20.6.2.3107 NMAC]

Recordkeeping and Reporting

- f) A <u>Quarterly Monitoring Report</u> shall continue to be filed with NMED in accordance with the general reporting schedule listed in **Table C1**. Each <u>Quarterly Monitoring Report</u> shall contain, at a minimum, the following information: [Subsection G of 20.6.6.23 NMAC]
 - Facility map with location and number of each well in relation to the contamination source it is intended to monitor
 - Depth-to-shallowest groundwater measurements
 - Field parameter measurements and parameter stabilization log
 - Analytical results (including the laboratory quality assurance and quality control summary report)
 - Updated groundwater elevation contour maps utilizing elevation contours of 2 ft or less in accordance with Subsection L of 20.6.6.23 NMAC
 - C. <u>Stormwater Management</u> During implementation of post-closure monitoring, the Permittee shall continue to manage stormwater at the dairy facility in accordance with 20.6.6 NMAC and the conditions as summarized in **Table B5** presented in **Section B100** of this Discharge Permit.
 - D. <u>Well Plugging and Abandonment</u> Upon written notification by certified mail from NMED that post-closure monitoring at the facility as specified in **Table B6** of this Discharge Permit may cease, the Permittee shall abandon all remaining facility wells in accordance with the conditions specified in Subsection C of 20.6.6.30 NMAC and **Table B7** below.

Table B7 Post-Closure Well Plugging and Abandonment Requirements

Engineering and Surveying

a) None required.

Operations and Maintenance

b) Within ninety (90) days of receipt of written notification from NMED, the Permittee shall properly plug and abandon the following four existing monitoring wells **MW-1**, **MW-2**, **MW-3** and **MW-4**. Wells shall be plugged and abandoned pursuant to 19.27.4 and Subsection C of 20.6.6.30 NMAC and in accordance with NMED's *Monitoring Well Construction and Abandonment Guidelines* and any other applicable local, state,

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Table B7 Post-Closure Well Plugging and Abandonment Requirements

and federal regulations. Documentation describing the plug and abandonment procedures, including photographic documentation, shall be presented in a **Post-Closure Well Abandonment Report**.

Inspection and Monitoring

c) None required.

Recordkeeping and Reporting

d) Provide to NMED a <u>Post-Closure Well Abandonment Report</u> within 60 days of completion of well plugging activities. The <u>Post-Closure Well Abandonment Report</u> shall provide information equivalent to the plugging record requirements of 19.27.4 NMAC. [Subsection C of 20.6.6.30 NMAC]

B103 Facility: Contingency Plan

- A. In the event NMED or the Permittee identifies any failures of the Discharge Permit or system not specifically noted herein, NMED may require the Permittee to develop for NMED approval a contingency or corrective action plan and schedule to cope with the failure(s) [20.6.2.3107.A(10) NMAC].
- B. Facility conditions that may occur as part of closure or post-closure and will invariably require Permittee action under one or more contingency plans include:
 - Exceedance of groundwater quality standards Constituent concentration(s) in one or more groundwater samples collected from a monitoring well intended to monitor contamination sources at a dairy facility including impoundments exceed (1) one or more of the groundwater standards of 20.6.2.3103 NMAC and (2) reported constituent concentration(s) in one or more groundwater samples collected from the upgradient monitoring well for four consecutive quarters.
 - 2. <u>Ineffective groundwater monitoring well(s)</u> One or more monitoring well(s) required by 20.6.6.23 NMAC are (1) not located hydrologically downgradient of the contamination source(s) intended to monitor, (2) not completed pursuant to 20.6.6.23 NMAC or (3) contains insufficient water to monitor groundwater quality effectively.
 - 3. **Spills, leaks, unauthorized discharge** Any spill or release that is not authorized under this Discharge Permit.

If a contingency or corrective action plan is required, the Permittee shall comply with the requirements of Sections 20.6.2.1203, 20.6.6.27 and 20.6.6.29 NMAC, and shall submit to NMED all information or documentation required by the applicable portions of Sections 20.6.2.1203, 20.6.6.27 and 20.6.6.29 NMAC. The Permittee may be required to abate water pollution pursuant to Sections 20.6.2.4000 through 20.6.2.4115 NMAC, should the corrective action plan not result in compliance with the standards and requirements set forth in Section 20.6.2.4103 NMAC.

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PART C GENERAL CONDITIONS

C100 Introduction

- A. NMED has reviewed the permit application for the proposed closure and has determined that the provisions of the Dairy Rule and applicable groundwater quality standards will be met in accordance with this Discharge Permit. General conditions for all Discharge Permits issued by the Ground Water Quality Bureau pursuant to NMAC 20.6.2 as well as specific conditions as applied to the closure and post-closure of a dairy facility with use of a land application area pursuant to 20.6.6.30 NMAC are summarized on **Table C1**. Unless otherwise specified in Parts A or B of this Discharge Permit, both the conditions as listed in this part and the facility-specific conditions as listed in **Part B** of this Discharge Permit are mandated to achieve permanent closure of the facility.
- B. For closure, the Permittee shall comply with the requirements of Section 20.6.6.30 NMAC and shall submit to NMED all information or documentation required by the applicable portions of Section 20.6.6.30 NMAC.

Table C1
General Discharge Permit Conditions for Dairy Facility Closure

General Discharge Fernit Conditions for Daily Facility Closure				
Engineering and Surveying				
a) None required				
Operations and Maintenance				
b) None required				
Inspection and Monitoring				
c) None required				
Recordkeening and Reporting				

Recordkeeping and Reporting

- d) Records of any inspection(s), repairs and maintenance conducted on facility infrastructure as related the former wastewater management system shall be maintained at the dairy facility or be available for NMED review.
- e) Continue to generate monitoring reports that contain monitoring data and information collected pursuant to the Dairy Rule and as described in applicable sections of this Discharge Permit.
- f) Retain required records for a minimum period of 10 years from the date of any sample collection, measurement, report or application in accordance with Section 20.6.6.33 NMAC.
- g) Unless otherwise identified in this Discharge Permit, submit monitoring reports to NMED quarterly according to the following schedule: [Subsection A of 20.6.6.24 NMAC]
- h) January 1 through March 31 (first quarter) report due by May 1
- i) April 1 through June 30 (second quarter) report due by August 1
- j) July 1 through September 30 (third quarter) report due by November 1
- k) October 1 through December 31 (fourth quarter) report due by February 1

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C101 Legal

A. Nothing in this Discharge Permit shall be construed in any way as relieving the Permittee of the obligation to comply with all applicable federal, state, and local laws, regulations, permits or orders [20.6.2 NMAC].

- B. Any violation of the requirements and conditions of this Discharge Permit, including any failure to allow NMED staff to enter and inspect records or facilities, or any refusal or failure to provide NMED with records or information, may subject the Permittee to a civil enforcement action. Pursuant to WQA 74-6-10(A) and (B), such action may include a compliance order requiring compliance immediately or in a specified time, assessing a civil penalty, terminating the Discharge Permit, or any combination of the foregoing; or an action in district court seeking injunctive relief, civil penalties, or both. Pursuant to WQA 74-6-10(C) and 74-6-10.1, civil penalties of up to \$15,000 per day of noncompliance may be assessed for each violation of the WQA 74-6-5, the WQCC Regulations, or this Discharge Permit, and civil penalties of up to \$10,000 per day of noncompliance may be assessed for each violation of any other provision of the WQA, or any regulation, standard, or order adopted pursuant to such other provision. In any action to enforce this Discharge Permit, the Permittee waives any objection to the admissibility as evidence of any data generated pursuant to this Discharge Permit. [74-6-10 WQA, 74-6-10.1 WQA]
- C. Pursuant to WQA 74-6-10.2(A-F), criminal penalties shall be assessed for any person who knowingly violates or knowingly causes or allows another person to:
 - Make any false material statement, representation, certification or omission of material fact in an application, record, report, plan or other document filed, submitted or required to be maintained under the WQA;
 - 2. Falsify, tamper with or render inaccurate any monitoring device, method or record required to be maintained under the WQA; or
 - 3. Fail to monitor, sample or report as required by a permit issued pursuant to a state or federal law or regulation, is subject to felony charges and shall be sentenced in accordance with the provisions of Section 31-18-15 NMSA 1978.
- D. Prior to the transfer of any ownership, control, or possession of this permitted facility or any portion thereof, the Permittee shall notify the proposed transferee in writing of the existence of this Discharge Permit and include a copy of this Discharge Permit with the notice in accordance with 20.6.2.3111 NMAC. The transferee(s) shall notify NMED, in writing, of the date of transfer of ownership and provide contact information for the new owner(s) pursuant to Subsection B of 20.6.6.12 NMAC. Notification of the transfer shall be submitted to NMED within 30 days of the ownership transfer date. [20.6.6.34 NMAC]
- E. Pursuant to WQA 74-6-5(o), the Permittee has a right to appeal the conditions and requirements as outlined in this Discharge Permit through filing a petition for review before the WQCC. Such petition shall be in writing to the WQCC within thirty (30) days of the receipt of this Discharge Permit. Unless a timely petition for review is made, the decision of NMED shall be final and not subject to judicial review.

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C102 General Inspection and Entry Requirements

A. Nothing in this Discharge Permit shall be construed as limiting in any way the inspection and entry authority of NMED under the WQA, the WQCC Regulations, or any other applicable law or regulation. [20.6.2.3107 NMAC, 74-6-9(B) & (E) WQA]

- B. The Permittee shall allow the Secretary or an authorized representative, upon the presentation of credentials, to: [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]
 - 1. Enter at regular business hours or at other reasonable times upon the Permittee's premises or other location where records must be kept under the conditions of this Discharge Permit, or under any federal or WQCC regulation.
 - 2. Inspect and copy, during regular business hours or at other reasonable times, any records required to be kept under the conditions of this Discharge Permit, or under any federal or WQCC regulation.
 - 3. Inspect, at regular business hours or at other reasonable times, any facility, equipment (including monitoring and control equipment or treatment works), practices or operations regulated or required under this Discharge Permit, or under any federal or WQCC regulation.
 - 4. Sample or monitor, at reasonable times for the purpose of assuring compliance with this Discharge Permit or as otherwise authorized by the WQA, any effluent, water contaminant, or receiving water at any location before or after discharge.

C103 General Record Keeping and Reporting Requirements

- A. The Permittee shall maintain a written record of the following:
 - 1. Amount of wastewater, effluent, leachate or other wastes discharged pursuant to this Discharge Permit. [20.6.2.3107.A NMAC]
 - 2. Operation, maintenance, and repair of all facilities/equipment used to treat, store or dispose of wastewater; to measure flow rates, to monitor water quality, or to collect other data required by this Discharge Permit. Per Section A of 20.6.2.3107 NMAC, this record shall include:
 - a. Repair, replacement or calibration of any monitoring equipment; and
 - b. Repair or replacement of any equipment used in the Permittee's waste or wastewater treatment and disposal system.
 - 3. Any spills, seeps, and/or leaks of effluent, and of leachate and/or process fluids not authorized by this Discharge Permit. [20.6.2.3107.A NMAC]
- B. The Permittee shall maintain at its facility a written record of all data and information related to field measurements, sampling, and analysis conducted pursuant to this Discharge Permit. The following information shall be recorded and shall be made available to NMED upon request:

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1. The dates, exact place and times of sampling or field measurements;

- 2. The name and job title of the individuals who performed each sample collection or field measurement;
- 3. The date of the analysis of each sample;
- 4. The name and address of the laboratory and the name and job title of the person that performed the analysis of each sample;
- 5. The analytical technique or method used to analyze each sample or take each field measurement;
- 6. The results of each analysis or field measurement, including raw data;
- 7. The results of any split sampling, spikes or repeat sampling; and
- 8. A description of the quality assurance (QA) and quality control (QC) procedures used.
- C. The Permittee shall furnish to NMED, within a reasonable time, any documents or other information which it may request to determine whether cause exists for terminating and/or renewing this Discharge Permit or to determine compliance with this Discharge Permit. The Permittee shall also furnish to NMED, upon request, copies of documents required to be kept by this Discharge Permit. [20.6.2.3107.D NMAC, 74-6-9(B) & (E) WQA]

Part D <u>MISCELLANEOUS</u>

D100 Supporting On-Line Documents

- A. Copies of the following documents can be downloaded from NMED's web site under Ground Water Quality Bureau or requested from the Bureau.
 - 1. Documents found at:

https://www.env.nm.gov/gwqb/forms/

- a. Notice of Intent to Discharge
- 2. Documents found at:

https://www.env.nm.gov/gwgb/acs/

- a. Application for a New Discharge Permit (dairy facility only)
- b. Application for Discharge Permit Renewal and/or Modification (dairy facility only)
- c. Application for Discharge Permit Renewal for Closure (dairy facility only)
- 3. Documents found at:

https://www.env.nm.gov/gwqb/gw-regulations/

- a. Regulation 20.6.2 NMAC Ground and Surface Water Protection
- b. Regulation 20.6.6 NMAC Supplemental Permitting Requirements for Dairy Facilities (Dairy Rule)

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c. Monitoring well construction and abandonment guidelines

d. Synthetically lined lagoons - liner material and site preparation guidelines

D101 Definitions

A. "abatement plan" means a description of any operational, monitoring, contingency and closure requirements and conditions for the prevention, investigation and abatement of water pollution, and includes Stage 1, Stage 2, or Stage 1 and 2 of the abatement plan, as approved by the secretary

B. "commission" means:

- 1. the New Mexico water quality control commission (WQCC), or
- 2. NMED, when used in connection with any administrative and enforcement activity
- C. "dairy facility" means the production area and the land application area (if applicable), where the discharge and associated activities will or do take place
- D. "Dairy rule" means 20.6.6 NMAC, as amended
- E. "NMED", "agency", or "division" means the New Mexico Environment Department or a constituent agency designated by the commission
- F. "discharge permit" means a discharge plan approved by NMED
- G. "discharge permit modification" means a change to the requirements of a discharge permit that result from a change in the location of the discharge, a significant increase in the quantity of the discharge, a significant change in the quality of the discharge; or as required by the secretary
- H. "discharge permit renewal" means the re-issuance of a discharge permit for the same, previously permitted discharge
- I. "discharge plan" means a description of any operational, monitoring, contingency, and closure requirements and conditions for any discharge of effluent or leachate which may move directly or indirectly into groundwater
- J. "discharge site" means the entire site where the discharge and associated activities will take place
- K. "discharge volume" means the measured daily volume of wastewater actually discharged within the production area. This definition does not include the volume of wastewater discharged to a land application area (if applicable).
- L. "disposal" means to abandon, deposit, inter or otherwise discard a fluid as a final action after its use has been achieved

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M. "existing dairy facility" means a dairy facility that is currently discharging, or has previously discharged and has not been issued a notice from NMED verifying that closure and post-closure monitoring activities have been completed

- N. "fluid" means material or substance which flows or moves whether in a semisolid, liquid, sludge, gas, or any other form or state
- O. "flow meter" means a device used to measure the volume of water, wastewater or stormwater that passes a particular reference section in a unit of time
- P. "freeboard" means the vertical distance between the elevation at the lowest point of the top inside edge of the impoundment and the design high water elevation of the water level in the impoundment
- Q. "groundwater" means interstitial water which occurs in saturated earth material and which is capable of entering a well in sufficient amounts to be utilized as a water supply
- R. "impoundment" means any structure designed and used for storage or disposal by evaporation of wastewater, stormwater, or a combination of both wastewater and stormwater. A multiple-cell impoundment system having at least one shared berm or barrier whose smallest cells have a cumulative constructed capacity of 10 percent or less of the constructed capacity of the largest cell shall be considered a single impoundment for the purposes of the Dairy Rule. A wastewater or stormwater transfer sump or a solids settling separator is not an impoundment
- S. "manure" means an agricultural waste composed of excreta of animals, and residual bedding materials, waste feed or other materials that have contacted excreta from such animals
- T. "maximum daily discharge volume" means the total daily volume of wastewater (expressed in gallons per day) authorized for discharge by a discharge permit. This definition does not include the volume of wastewater discharged to a land application area (as applicable)
- U. "owner of record" means an owner of property according to the property records of the tax assessor in the county in which the discharge site is located at the time the application was deemed administratively complete
- V. "Permittee" means a person who is issued or receives by transfer a discharge permit for a dairy facility or, in the absence of a discharge permit, a person who makes or controls a discharge at a dairy facility.
- W. "production area" means that part of the animal feeding operation that includes the following: the animal confinement areas; the manure, residual solids and compost storage areas; the raw materials storage areas; and the wastewater and stormwater containment areas. The animal confinement areas include but are not limited to open lots, housed lots, feedlots, confinement barns, stall barns, free stall barns, milkrooms, milk centers, cowyards, barnyards, hospital pens and barns, and animal walkways. The manure, residual solids and compost storage areas include, but are not limited to, storage sheds, stockpiles, static piles,

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and composting piles. The raw materials storage areas include, but are not limited, to feed silos, silage storage areas, feed storage barns, and liquid feed tanks. The wastewater and stormwater containment areas include, but are not limited to, settling separators, impoundments, sumps, run-off drainage channels, and areas within berms and diversions which prohibit uncontaminated stormwater from coming into contact with contaminants

- X. "responsible person" means a person who is required to submit a discharge permit or who submits a discharge permit
- Y. "secretary" or "director" means the secretary of the New Mexico Environment Department or the director of a constituent agency designated by the commission
- Z. "**spillway**" means a structure used for controlled releases from an impoundment designed to receive stormwater, in a manner that protects the structural integrity of the impoundment
- AA. "stormwater" means direct precipitation and run-off that comes into contact with water contaminants within the production area of a dairy facility
- BB. "**TDS**" means total dissolved solids as determined by the "calculation method" (sum of constituents), by the "residue on evaporation method at 180 degrees" of the "U.S. geological survey techniques of water resource investigations," or by conductivity, as the secretary may determine
- CC. "toxic pollutant" means a water contaminant or combination of water contaminants in concentration(s) which, upon exposure, ingestion, or assimilation either directly from the environment or indirectly by ingestion through food chains, will unreasonably threaten to injure human health, or the health of animals or plants which are commonly hatched, bred, cultivated or protected for use by man for food or economic benefit; as used in this definition injuries to health include death, histopathologic change, clinical symptoms of disease, behavioral abnormalities, genetic mutation, physiological malfunctions or physical deformations in such organisms or their offspring; in order to be considered a toxic pollutant a contaminant must be one or a combination of the potential toxic pollutants listed below and be at a concentration shown by scientific information currently available to the public to have potential for causing one or more of the effects listed above; any water contaminant or combination of the water contaminants in the list below creating a lifetime risk of more than one cancer per 100,000 exposed persons is a toxic pollutant. The list of toxic pollutants recognized by NMED can be found in Subsection T of 20.6.2.7 NMAC.
- DD. "unauthorized discharge" means a release of wastewater, stormwater or other substances containing water contaminants not approved by a discharge permit
- EE. "wastewater" means water, that has come into contact with water contaminants as a result of being directly or indirectly used in the operations of a dairy facility including, but not limited to, the following: washing, cleaning, or flushing barns or other roof-covered production areas; washing of animals; spray-cooling of animals (except in open lots); and cooling or cleaning of feed mills and equipment. Wastewater does not include overflow from the drinking water system or stormwater unless overflow or stormwater that is collected is

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comingled with wastewater, or it comes into contact with water contaminants as a result of being directly or indirectly used in dairy facility operations

- FF. "wastes" means sewage, industrial wastes, or any other liquid, gaseous or solid substance which will pollute any waters of the state
- GG. "water" means all water including water situated wholly or partly within or bordering upon the state, whether surface or subsurface, public or private, except private waters that do not combine with other surface or subsurface water
- HH. "water contaminant" means any substance that could alter if discharged or spilled the physical, chemical, biological or radiological qualities of water; "water contaminant" does not mean source, special nuclear or by-product material as defined by the Atomic Energy Act of 1954
- II. "water pollution" means introducing or permitting the introduction into water, either directly or indirectly, of one or more water contaminants in such quantity and of such duration as may with reasonable probability injure human health, animal or plant life or property, or to unreasonably interfere with the public welfare or the use of property

D102 Acronyms

CQA	construction quality assurance
CQC	construction quality control
DP	discharge permit
FEMA	federal emergency management administration
FIRM	flood insurance rate map
gpd	gallon per day
mg/L	milligram per liter
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMP	Nutrient Management Plan
NMSA	New Mexico Statutes Annotated
TDS	total dissolved solids
WQA	New Mexico Water Quality Act
WQCC	Water Quality Control Commission